VERMONT 1978 I&D CONDITIONS REPORT - Northern Region

PEST: (common name) Gypsy Moth
(specific name) Porthetria dispar

HOST: Hardwoods, White Pine

PRESENT CONDITIONS: Area - 38,162 Acres* of moderate to heavy defoliation

*Adding Gene's Acreage of 1,460 for Rutland Co gives 39,622 for the state

Location - Champlain Valley Counties of Franklin, Grand Isle, Chittenden, Addison, ~~Rutland~~ Chittenden Co., with 25,540 acres of defoliation - most severely affected.

Severity (specify measurements or estimates) -
Moderate to Heavy Defoliation
Some tree mortality, particularly white pine
Considerable OAK DieBACK

Losses (best estimates of volume and/or $) -

TREND:

Past to present - Increased dramatically over last year's 7,680 acres.

Future - Declining in older infestations but overall population trend is increasing

CONTROL PROJECTS (method, material, acres, results) -
Many individuals in the greater Burlington area had their lots aerially sprayed with Sevin. A cooperative suppression project is proposed for 1979.

COMMENTS: Although mortality of overwintering egg masses above snowline was evident in the northern most sections of the infested areas this spring, in general, winter temperatures in 1977-78 were not sufficiently cold enough to cause mortality of unprotected eggs. This could account for the dramatic population increases experienced this year.

VERMONT 1978 I&D CONDITIONS REPORT

PEST: (common name) Spruce Budworm
(specific name) Choristoneura fumiferana

HOST: Balsam Fir And Spruce

PRESENT CONDITIONS: Area - 61,560 Acres of moderate to heavy defoliation

Location - Northeastern Vermont
Mostly in Essex, Orleans, And Caledonia counties. Moderate damage on 400 acres in Lamoille county.

Severity (specify measurements or estimates) -
Moderate - Heavy Defoliation due to past 2-3 years' of feeding. Some tree mortality now showing up, particularly in Holland, Canaan, And Greensboro.

Losses (best estimates of volume and/or $) -

TREND:

Past to present - Overall defoliation damage increased in 1978. ~~but in~~ 61,560 Acres aerially mapped this year compared to 44,000 Acres last year.

Future - Overall population trend is down. Almost All Areas visited in June had light to moderate larval and pupal populations present. All Egg Mass Surveys conducted for Balsam Fir in August indicate Low infestation levels for 1979.

CONTROL PROJECTS (method, material, acres, results) -

None

COMMENTS: Parasite Studies: Pupae were collected in late June from 14 ~~areas moderately to~~ areas rated as moderate to heavily infested based on overwintering larval surveys. Of the 955 pupae that yielded either adults or parasites, an average of 31.5% yielded parasites, with a range of 7.9% to 49.0% parasitism. Many of the pupae that yielded neither adults nor parasites were apparently diseased. The most abundant parasite recovered appears to be the Hymenopteran Ephialtes ontario.

VERMONT 1978 I&D CONDITIONS REPORT - Northern Region

PEST: (common name) Maple Leaf Cutter
(specific name) Paraclemensia aceritolliella

HOST: Sugar Maple

PRESENT CONDITIONS: Area - 6,500 acres aerially mapped as heavy defoliation.

Location - Orange County primarily - 5900 acres here. Lesser amounts in Franklin, Chittenden, and Lamoille counties.

Severity (specify measurements or estimates) -
Only heavy defoliation could be seen from the air this year.

Losses (best estimates of volume and/or $) -

TREND:

Past to present - Populations appear to be increasing in southern portions of the state but decreasing in the older infestations in the north.

Future - Acreage in Northern half of the state decreased from 35,250 acres in 1977 to 6,500 acres in 1978. Overall state populations are still increasing.

CONTROL PROJECTS (method, material, acres, results) -
Carbaryl and Acephate were tested against adults on 110 acres while carbaryl, Acephate, and Bacillus thuringiensis (B.t.) were tested against larvae on 190 acres. All materials were applied by single-engine fixed wing aircraft.

COMMENTS: The efficacy data has not yet been analyzed but indications are that acephate performed well as an adulticide and B.t., though not quite as effective as carbaryl, resulted in good [redacted] foliage protection

VERMONT 1978 I&D CONDITIONS REPORT – Northern Region

PEST: (common name) Larch Decline Associated with
(specific name) Eastern Larch Beetle
Dendroctonus simplex

HOST: Eastern Larch

PRESENT CONDITIONS: Area - 280 Acres containing tree mortality

Location - Scattered throughout the Area (Northern Vt.)

Severity (specify measurements or estimates) -
Many dead And dying trees

Losses (best estimates of volume and/or $) -

TREND:

Past to present - Increasing from the original
232 Acres discovered in 1976.

Future -

CONTROL PROJECTS (method, material, acres, results) -

COMMENTS: The decline is presummed to have been triggered by drought conditions in 1974 And 1975. Now the beetles have really gained A foothold And Are increasing the Amount of mortality in mAny AreAS.

VERMONT 1978 I&D CONDITIONS REPORT – Northern Region

PEST: (common name) Balsam Twig Aphid –
(specific name) Mindarus abietinus

HOST: Balsam Fir

PRESENT CONDITIONS: Area –

Location – Occurred in virtually every Balsam Fir christmas tree plantation in northern Vermont this year. Damage was severe in many locations.

Severity (specify measurements or estimates) –

Losses (best estimates of volume and/or $) –

TREND:

Past to present – Increased 1978 damage was heavier than the widespread moderate to heavy
Future – damage reported in 1977.

?

CONTROL PROJECTS (method, material, acres, results) –

COMMENTS: Many growers resorted to insecticide treatment to reduce their losses caused by this insect.

VERMONT 1978 I&D CONDITIONS REPORT - Northern Region.

PEST: (common name) Pine Engraver
(specific name) Ips pini

HOST: Red Pine

PRESENT CONDITIONS: Area - 2 Acre plantation of small sawtimber size trees

Location - Milton Town, Chittenden County

Severity (specify measurements or estimates) -
About 1/10 Acre pocket of dead and dying trees.

Losses (best estimates of volume and/or $) -

TREND:

Past to present - Only suppressed trees infested prior to this year. Now dominant trees being killed.

Future -

CONTROL PROJECTS (method, material, acres, results) -

COMMENTS: The overstocked nature of the plantation, sandy soils, and lack of moisture this year probably led to the problem.

VERMONT 1978 I&D CONDITIONS REPORT

PEST: (common name) Scleroderris Canker
(specific name) Gremmeniella Abietina

HOST: Red Pine, Scotch Pine

PRESENT CONDITIONS: Area - Based on a complete statewide survey begun in 1977 and nearly completed now, 54 plantations comprising about 580 acres, have been found to be infected.
Location - Northern Vermont: Lamoille County is the most severely infected, followed in descending order of incidence, by the counties of Chittenden, Washington, Orange, Caledonia, Orleans, Addison, and Franklin.
Severity (specify measurements or estimates) - Most plantations exhibit only a trace or light amount of infection. 7 plantations comprising 39 acres were found to contain tree mortality due to Scleroderris. 2 of these plantations (14 acres) were eradicated in 1977.
Losses (best estimates of volume and/or $) -

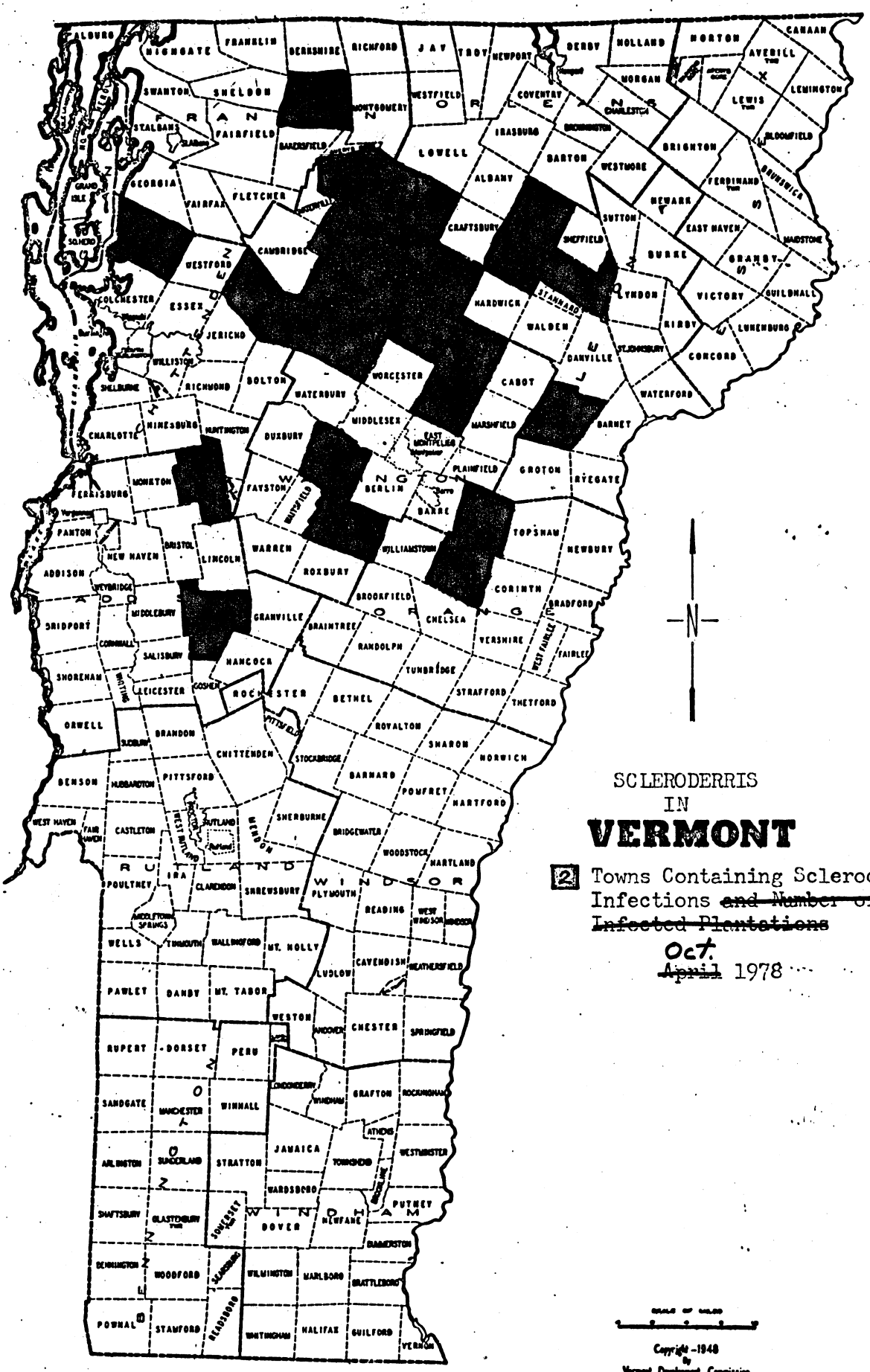
TREND: Unknown

Past to present -

Future -

CONTROL PROJECTS (method, material, acres, results) -
We are cooperating with a forest pathologist from the University of Vermont in researching various silvicultural control methods such as pruning, cutting, thinning, burning, etc.

COMMENTS:



SCLERODERRIS
IN
VERMONT

2 Towns Containing Scleroderris Infections ~~and Number of Infected Plantations~~

~~April~~ Oct. 1978

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By
Vermont Development Commission
For The
State of Vermont

VERMONT 1978 I&D CONDITIONS REPORT

PEST: (common name) Yellow-Headed Spruce Sawfly
(specific name) Pikonema alaskensis

HOST: Spruces

PRESENT CONDITIONS: Area - Shade tree spruces

Location - St. Johnsbury area

Severity (specify measurements or estimates) -
Has caused considerable homeowner concern.
More widespread than in previous years.

Losses (best estimates of volume and/or $) -

TREND:

Past to present -

Future -

CONTROL PROJECTS (method, material, acres, results) -

COMMENTS:

VERMONT 1978 I&D CONDITIONS REPORT

PEST: (common name) Beech Bark Disease
(specific name) Cryptococcus fagi - Nectria coccinea var. faginata

HOST: American Beech

PRESENT CONDITIONS: Area - Throughout the 2 million acres of Birch-Beech-Maple type in the state.

Location - Statewide

Severity (specify measurements or estimates) -
Heavy beech mortality

Losses (best estimates of volume and/or $) -
In excess of 12 million board feet per year

TREND:

Past to present - Beech scale populations appeared to be somewhat lighter than usual this year.

Future -

CONTROL PROJECTS (method, material, acres, results) -

COMMENTS:

VERMONT 1978 I&D CONDITIONS REPORT – Northern Region

PEST: (common name) White Pine Blister Rust
(specific name) Cronartium ribicola

HOST: White Pine

PRESENT CONDITIONS: Area -

Location - Scattered throughout (northern) Vermont

Severity (specify measurements or estimates) -
Moderate number of new infections noticed

Losses (best estimates of volume and/or $) -

TREND:

Past to present - Damage appears to be increasing

Future -

CONTROL PROJECTS (method, material, acres, results) -
Ribes eradicated on 25 acres in Caledonia County. There have been several landowner requests for eradication work this year, most of which will be done next year.

COMMENTS:

VERMONT 1978 I&D CONDITIONS REPORT

PEST: (common name) Locust Leaf Miner
(specific name) Xenochalepus dorsalis

HOST: Black Locust

PRESENT CONDITIONS: Area - 10 Acres

Location - Richmond, Vermont

Severity (specify measurements or estimates) -
Heavy defoliation

Losses (best estimates of volume and/or $) -

TREND:

Past to present - Third year in a row of defoliation.

Future - Unknown

CONTROL PROJECTS (method, material, acres, results) -

COMMENTS:

VERMONT 1978 I&D CONDITIONS REPORT - Northern Region

PEST: (common name) Balsam Gall Midge
(specific name) Dasineura balsamicola

HOST: Balsam Fir Christmas Tree Plantations

PRESENT CONDITIONS: Area - 350 Acres Known to be infested.

Location - Northern Vermont, primarily Caledonia, Orleans, And Lamoille Counties.

Severity (specify measurements or estimates) -
causing a light to moderate drop of 1978 foliage over most of the acreage affected

Losses (best estimates of volume and/or $) -

TREND:

Past to present - Stable or decreasing in most plantations this year.

Future - Increasing in some of the previously undamaged plantations

CONTROL PROJECTS (method, material, acres, results) -

COMMENTS:

VERMONT 1978 I&D CONDITIONS REPORT

PEST: (common name)
(specific name) Phigalia titea in association with several species of unidentified leaftiers.

HOST:
Red OAK

PRESENT CONDITIONS: Area - 550 Acres - one Area

Location - Middlesex & Waterbury
in Washington County

Severity (specify measurements or estimates) -
Moderate Defoliation Damage

Losses (best estimates of volume and/or $) -

TREND:

Past to present - First year of noticeable defoliation

Future - Unknown but probably increasing

CONTROL PROJECTS (method, material, acres, results) -

COMMENTS: